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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,875	01/20/2004	George Nordstrom	81092030	1874
28395	7590	12/21/2005	EXAMINER	
BROOKS KUSHMAN P.C./FGTL			BALSIS, SHAY L	
1000 TOWN CENTER			ART UNIT	
22ND FLOOR			PAPER NUMBER	
SOUTHFIELD, MI 48075-1238			1744	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,875

Applicant(s)

NORDSTROM ET AL.

Examiner

Shay L. Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/8/05, 1/20/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

As indicated in the response to the species restriction requirement, claim 1 is a generic claim and therefore, the election of figure 5 without traverse reads on claims 1-15.

Claim Objections

Claims 1-8 are objected to because of the following informalities: Claim 1, line 3 should read --axis of rotation--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4 and 10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for how the cleaning member cleans the inside surface of the housing, does not reasonably provide enablement for how the outside surface of the spindle can be cleaned with the cleaning member. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The examiner is confused how the cleaning members disposed along an inside edge of the support plate clean an exterior surface of the spindle when the apparatus is rotated by the spindle. On machine tools, the spindle rotates therefore when the arbor is attached to the spindle, the arbor will also rotate. Since the support plate is attached to the arbor the support plate will also rotate. The examiner is then confused how the cleaning

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member, which is attached to the support plate, will clean the exterior surface of the spindle since both the spindle and the cleaning member will both be rotating at the same speed. Instead it would appear that the since the arbor is firmly connected to the spindle (and not freely rotating within the spindle) the arbor, support plate and cleaning member will rotate *with* the spindle rather than around the spindle. Therefore, the cleaning members contacting the exterior surface of the spindle will remain in contact with the same portion of the spindle while the spindle is rotating. Please correct or clarify how the cleaning members will rotate *about* the spindle when they are rotating *with* it.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 7, 9, 11, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Begle (USPN 2619009).

Begle teaches an apparatus comprising a spindle (11) and a housing (10) wherein the housing is disposed around and spaced apart from the spindle. There is an arbor (21) disposed on a support plate (not labeled but shown as the plate portion from which the bristles extend from on figure 1). The arbor is adapted for attachment (13) to the spindle. There is a cleaning

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member (27) disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminates.

With regards to claim 2, the cleaning member is a plurality of bristles (figure 1).

With regards to claim 7, the cleaning member is disposed at an angle relative to the support plate (the angle is equal to 90 degrees).

With regards to claim 9, Begle teaches an apparatus comprising a spindle (11, 12) and a housing (10) wherein the housing is disposed around and spaced apart from the spindle. There is a fixture (13) secured to the machine tool in a stationary position. There is a first coupling member (9) on the support plate (not labeled but shown as the plate portion from which the bristles extend from on figure 1) adapted to engage a second coupling member (17) disposed on the spindle. There is a cleaning member (27) disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminates.

With regards to claim 11, the cleaning member is a plurality of flexible bristles (figure 1).

With regards to claim 14, the cleaning member is disposed at an angle relative to the support plate (the angle is equal to 90 degrees).

Claims 1-2, 5-7, 9, 11 and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Pepin et al. (USPN 6776698).

Pepin teaches an apparatus comprising a spindle (27) and a housing (R) wherein the housing is disposed around and spaced apart from the spindle. There is an arbor (30) disposed on a support plate (50). The arbor is adapted for attachment to the spindle (figure 3). There is a cleaning member (52) disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminates.

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With regards to claim 2, the cleaning member is a plurality of bristles (52).

With regards to claim 5, the cleaning member is disposed along an outside edge of the support plate for cleaning an interior surface of the housing when the cleaning member contacts the interior surface (figure 2).

With regards to claim 6, the cleaning member is disposed radially about the axis of rotation (figure 2).

With regards to claim 7, the cleaning member is disposed at an angle relative to the support plate (the bristles are angled between 0 and 90).

With regards to claim 9, Pepin teaches an apparatus comprising a spindle (A) and a housing (R) wherein the housing is disposed around and spaced apart from the spindle. There is a fixture (20) secured to the machine tool in a stationary position. There is a first coupling member (30) on the support plate (50) adapted to engage a second coupling member (27) disposed on the spindle. There is a cleaning member (52) disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminants.

With regards to claim 11, the cleaning member is a plurality of bristles (52).

With regards to claim 13, the cleaning member is disposed radially about the axis of rotation (figure 2).

With regards to claim 14, the cleaning member is disposed at an angle relative to the support plate (the angle could be equal to any angle between 0 and 90).

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Claims 1, 5-8, 9, 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Shelton (USPN 6839930).

Shelton teaches an apparatus comprising a spindle (34) and a housing (kiln) wherein the housing is disposed around and spaced apart from the spindle. There is an arbor (21, 22) disposed on a support plate (43). The arbor is adapted for attachment to the spindle (figure 1). There is a cleaning member (45) disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminants.

With regards to claim 5, the cleaning member is disposed along an outside edge of the support plate for cleaning an interior surface of the housing when the cleaning member contacts the interior surface.

With regards to claim 6, the cleaning member is disposed radially about the axis of rotation (figure 3).

With regards to claim 7, the cleaning member is disposed at an angle relative to the support plate (the bristles are angled between 0 and 90).

With regards to claim 8, there is further a conduit disposed on the support plate discharging pressurized fluid through an aperture (50).

With regards to claim 9, Shelton teaches an apparatus comprising a spindle (34) and a housing (kiln) wherein the housing is disposed around and spaced apart from the spindle. There is a fixture (31) secured to the machine tool in a stationary position. There is a first coupling member (46) on the support plate (43) adapted to engage a second coupling member (32) disposed on the spindle. There is a cleaning member (45) disposed on and extending from the

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support plate. The cleaning member contacts a surface of the machine tool to remove contaminates.

With regards to claim 13, the cleaning member is disposed radially about the axis of rotation (figure 3).

With regards to claim 14, the cleaning member is disposed at an angle relative to the support plate (the angle could be equal to any angle between 0 and 90).

With regards to claim 15, there is further a conduit disposed on the support plate discharging pressurized fluid through an aperture (50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 1-7 and 9-14 are rejected under 35 U.S.C. 102(b) as being 35 U.S.C. 103(a) as being unpatentable over webpage “#3956-01 Var.-Speed MultiPro® Kit w/Flex-Shaft” herein referred to as “Dremel” in view of Johnson (USPN 621026 1).

Dremel teaches an apparatus comprising a spindle. There is an arbor disposed on a support plate. The arbor is adapted for attachment to the spindle. There is a cleaning member disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminates.

With regards to claim 2, the cleaning member is a plurality of bristles (bristle brushes).

With regards to claim 3, the cleaning member is a flexible wiper (rubber polishing points).

With regards to claim 4, the cleaning member is disposed along an inside edge of the support plate for cleaning an exterior surface of the spindle (since the arbor is flexible the cleaning member can be used to clean the outside of the spindle).

With regards to claim 6, the cleaning member is disposed radially about the axis of rotation.

With regards to claim 7, the cleaning member is disposed at an angle relative to the support plate (the bristles are angled between 0 and 90).

With regards to claim 9, Dremel teaches an apparatus comprising a spindle. There is a fixture secured to the machine tool in a stationary position. There is a first coupling member on the support plate adapted to engage a second coupling member disposed on the spindle. There is a cleaning member disposed on and extending from the support plate. The cleaning member contacts a surface of the machine tool to remove contaminates.

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With regards to claim 10, the cleaning member is disposed along an inside edge of the support plate for cleaning an exterior surface of the spindle (since the coupling members are flexible the cleaning member can be used to the clean the outside of the spindle)

With regards to claim 11, the cleaning member is a plurality of bristles (bristle brushes).

With regards to claim 12, the cleaning member is flexible wiper (rubber polishing points).

With regards to claim 13, the cleaning member is disposed radially about the axis of rotation.

With regards to claim 14, the cleaning member is disposed at an angle relative to the support plate (the angle could be equal to any angle between 0 and 90).

Dremel teaches all the essential elements of the claimed invention however fails to teach a housing surround the spindle. Johnson teaches a housing that is to surround a portion of the spindle on a machine tool. The housing can be used on the rotational tool known as the DREMEL tool (col. 2, lines 1-3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Johnson's shield on Dremel's tool to maximize protection of an operator yet permit the tool to achieve its intended purpose. The shield would prevent shattered tools or thrown wires from injuring the user (col. 1, lines 15-27).

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepin in view of Franzino et al (USPN 6467121).

Pepin teaches all the essential elements of the claimed invention however fails to teach that the cleaning member is made from a flexible wiper. Franzino teaches a tube scrubber comprising a flexible wiper (22). It would have been obvious to modify Pepin's cleaning

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member so that a flexible wiper could be used in place of the bristles as taught by Franzino since wipers do not wear down as fast and therefore do not need to be changed as often as cleaning members with bristles. Additionally, steel brushes can mar the inside of delicate housing walls (col. 1, lines 16-22).

Conclusion

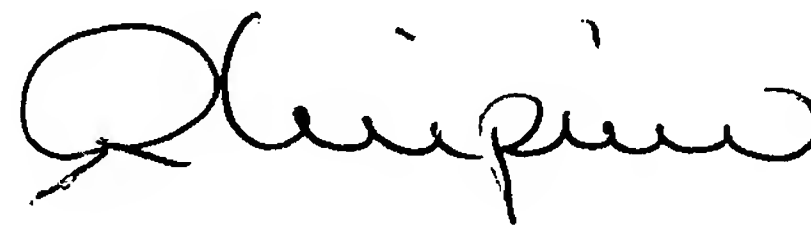
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Slb
12/15/05



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